

Title (en)

RNTI-DEPENDENT SCRAMBLING SEQUENCE INITIALIZATION

Title (de)

RNTI-ABHÄNGIGE VERWÜRFLUNGSSEQUENZINITIALISIERUNG

Title (fr)

INITIALISATION D'UNE SÉQUENCE DE BROUILLAGE EN FONCTION D'UN RNTI

Publication

**EP 2327268 B1 20180228 (EN)**

Application

**EP 09743979 A 20090807**

Priority

- US 2009053150 W 20090807
- US 8710008 P 20080807
- US 53644009 A 20090805

Abstract (en)

[origin: US2010034161A1] Systems and methodologies are described that facilitate initializing scrambling sequence generation in a wireless communication environment. Scrambling sequence generation can be initialized (e.g., at a start of each subframe, . . .) at least in part as a function of a type of Radio Network Temporary Identifier (RNTI). Further, the type of RNTI utilized for initialization of scrambling sequence generation can correspond to a transmission type (e.g., whether the transmission is related to system information, paging, random access response, scheduled transmission or contention resolution message of a random access procedure, SPS traffic, regular unicast traffic, . . .). Moreover, the scrambling sequence can be leveraged to scramble data for transmission over a data channel (e.g., Physical Downlink Shared Channel (PDSCH), Physical Uplink Shared Channel (PUSCH), . . .). Further, a receiving wireless communication apparatus can utilize a descrambling sequence similarly yielded based upon the type of RNTI corresponding to the transmission type.

IPC 8 full level

**H04W 74/08** (2009.01); **H04B 1/707** (2011.01)

CPC (source: BR EP KR US)

**H04B 1/707** (2013.01 - BR EP US); **H04J 13/10** (2013.01 - KR); **H04J 13/16** (2013.01 - KR); **H04W 74/08** (2013.01 - KR);  
**H04W 74/0833** (2013.01 - BR EP US); **H04W 74/002** (2013.01 - BR EP US); **H04W 74/0866** (2013.01 - BR EP US)

Citation (examination)

- NOKIA CORPORATION ET AL: "Allocation of RNTI values", 3GPP DRAFT; R2-080987, 3RD GENERATION PARTNERSHIP PROJECT (3GPP), MOBILE COMPETENCE CENTRE ; 650, ROUTE DES LUCIOLES ; F-06921 SOPHIA-ANTIPOLIS CEDEX ; FRANCE, vol. RAN WG2, no. Sorrento, Italy; 20080204, 4 February 2008 (2008-02-04), XP050138781
- ERICSSON: "Scrambling sequences", 3GPP DRAFT; R1-074837 {SCRAMBLING}, 3RD GENERATION PARTNERSHIP PROJECT (3GPP), MOBILE COMPETENCE CENTRE ; 650, ROUTE DES LUCIOLES ; F-06921 SOPHIA-ANTIPOLIS CEDEX ; FRANCE, vol. RAN WG1, no. Korea; 20071031, 31 October 2007 (2007-10-31), XP050108296
- NOKIA SIEMENS NETWORKS ET AL: "Scrambling Sequence Initialisation", 3GPP DRAFT; R1-080940\_SCRAMBLINGINIT, 3RD GENERATION PARTNERSHIP PROJECT (3GPP), MOBILE COMPETENCE CENTRE ; 650, ROUTE DES LUCIOLES ; F-06921 SOPHIA-ANTIPOLIS CEDEX ; FRANCE, vol. RAN WG1, no. Sorrento, Italy; 20080205, 5 February 2008 (2008-02-05), XP050109412
- 3GPP DRAFT; R1-082426 SCRAMBLING OF PUSCH, 3RD GENERATION PARTNERSHIP PROJECT (3GPP), MOBILE COMPETENCE CENTRE ; 650, ROUTE DES LUCIOLES ; F-06921 SOPHIA-ANTIPOLIS CEDEX ; FRANCE, vol. RAN WG1, no. Warsaw, Poland; 20080624, 24 June 2008 (2008-06-24), XP050110704

Cited by

CN110545157A

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK SM TR

DOCDB simple family (publication)

**US 2010034161 A1 20100211; US 8588150 B2 20131119**; AU 2009279478 A1 20100211; AU 2009279478 B2 20140508;  
BR PI0917261 A2 20151110; BR PI0917261 B1 20201006; CA 2731640 A1 20100211; CA 2731640 C 20160315; CN 102113403 A 20110629;  
CN 102113403 B 20150708; EP 2327268 A2 20110601; EP 2327268 B1 20180228; ES 2667245 T3 20180510; HK 1156458 A1 20120608;  
HU E036796 T2 20180730; IL 210706 A0 20110331; JP 2011530892 A 20111222; JP 5461555 B2 20140402; KR 101432757 B1 20140821;  
KR 20110050502 A 20110513; MX 2011001434 A 20110315; MY 154730 A 20150715; RU 2011108313 A 20120920; RU 2536804 C2 20141227;  
TW 201012089 A 20100316; TW 201320633 A 20130516; TW I392245 B 20130401; TW I508468 B 20151111; UA 96901 C2 20111212;  
WO 2010017475 A2 20100211; WO 2010017475 A3 20100401

DOCDB simple family (application)

**US 53644009 A 20090805**; AU 2009279478 A 20090807; BR PI0917261 A 20090807; CA 2731640 A 20090807; CN 200980130800 A 20090807;  
EP 09743979 A 20090807; ES 09743979 T 20090807; HK 11110294 A 20110930; HU E09743979 A 20090807; IL 21070611 A 20110117;  
JP 2011522275 A 20090807; KR 20117005356 A 20090807; MX 2011001434 A 20090807; MY PI20110246 A 20090807;  
RU 2011108313 A 20090807; TW 102101524 A 20090810; TW 98126792 A 20090810; UA A201102542 A 20090807;  
US 2009053150 W 20090807